# Training Package Delivery and Student Study Outline for the Diploma of Information Technology Networking (ICA50411) in Semester 2, 2013

# Incorporating Certificate III in Information, Digital Media and Technology (ICA30111) and Certificate IV in Information Technology Networking (ICA40411)

In July 2011 the new National Training Package for Information Technology (ICA11) was released. This replaced the previous Training Package version (ICA05). Qualifications are defined by industry choosing a combination of competencies required for certain job outcomes. Details of the new National Qualifications and the competencies can be found at [**training.gov.au**](http://training.gov.au).

In May 2012 the South Australian Government released details of new funding arrangements for VET qualifications. This funding includes eligibility requirements for receiving government subsidised training. Details of the new arrangements, known as Skills For All, can be found at [**www.skills.sa.gov.au**](http://www.skills.sa.gov.au).

TAFESA South Institute has responded to the new ICA11 Training Package requirements and South Australian Government funding arrangements and this document provides the details for the offerings in the Networking related qualifications.

There are a number of possible study plans with the recommended Diploma study plan having the following key features:

* The recommended study plan will take a new student with no previous networking experience 18 months to complete and will have a Certificate III in Information, Digital Media and Technology exit point after 6 months, a Certificate IV exit point after the first 12 months.
* There is a focus on PC Hardware, installing and configuring small wireless networks and small office home office networks and installing, configuring and administering **Microsoft Windows Server** and **Linux** network operating systems.
* There is an increased focus**,** on **virtualization, messaging** and **voice technologies** and **content management software**
* A focus on the **Cisco CCNA Discovery** curriculum

For details of the competencies in each of the Networking qualifications and associated skill sets see pages 5 to 14.

Please follow the study plan guidance on the next page when choosing your personal study plan.

# Choosing a Diploma Study Plan

**This is an Optional Study Plan** **(15 Month Diploma)**  
I am interested in achieving the Diploma of Information Technology Networking (ICA50411) but:

* I have studied IT at school or have good basic understanding of IT
* I am NOT concerned with having early exit options such as the Certificate III.
* I want to achieve the Certificate IV in the first 9 months.
* I want to continue onto the Advanced Diploma of Network Security (ICA60211)

Using the subject descriptions, mark which ones you think you already know and make an appointment to discuss your personal study pathway via the contacts on Page 4.

Go to Page 4 for details of the subjects you will need to study in each Semester.

I am interested in achieving the Diploma of Information Technology Networking (ICA50411), but have prior experience or knowledge and/or I’m not sure what my study plan would be.

Go to Page 3 for details of the subjects you will need to study in each Semester.

**This is a Recommended Study Plan (18 Month Diploma)**  
I am interested in achieving the Diploma of Information Technology Networking (ICA50411) but also:

* Achieving the Certificate III in the first 6 months.
* Achieving the Certificate IV in the first 12 months.
* I want to continue onto the Advanced Diploma of Network Security (ICA60211)

**TAFESA Study Plan for Full-Time Students**

The following table shows the recommended study plan for the Diploma of Information Technology Networking with exit options and skills sets. Each stage is one Semester (or 6 months) in length for Full-Time students. Some subjects are taught in a term or part of a term, others go for the entire semester. The length of time for Part-Time students will depend on the number of subjects studied in each semester.

## Plan 1:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Stage 1 (Year 1) | | Stage 2 (Year 1) | | Stage 3 (Year 2) | | Stage 4 (Year 2) | |
| Semester 1 | | Semester 2 | | Semester 1 | | Semester 2 | |
| Term 1 | **Term 2** | **Term 1** | **Term 2** | **Term 1** | **Term 2** | **Term 1** | **Term 2** |
| 3ITE (9) 3PAC (9) 3WHS, 3CUD & 3SWP (1) | 3CDH(9)  3WSF(9) | 4WNI((9)  4LXA(9) | 4WAD(9)  5LXN (9) | 5CDR (9)  5ISV (9)  5EVC (9) | 5CDD (9)  5CNW(9)  5ECS (9) | 6CNSA (9)  6EWS (9) | 6CNSB (9) 6EWD (9) |
| 4IVM(12) | | 4CDB(18)  4CEP(18) | |  | | 6NPS (18)  6NCP (18) | |
| Skill Sets | | | | | | | |
| Gain the:   * *Hardware Technicians Skill Set* | | Gain the**:**   * ***Certified Networking Technician Skill Set*** * ***Certified Server Administrator Skill Set*** * ***Certified Technology Specialist - Graphical User Interfaces Skill Set*** * ***System and Network Plus Technician Skill Set*** | | Gain the**:**   * ***Virtualisation Specialist Skill Set*** * ***Certified Network Associate Technology Specialist Skill Set*** | | Gain the**:** | |
| Exit Qualifications | | | | | | | |
| Exit with the *Certificate III in Information, Digital Media and Technology* | | Exit with the ***Certificate IV in Information Technology Networking*** | | Exit with the ***Diploma of Information Technology Networking*** | | Exit with the ***Advanced Diploma of Network Security*** | |

**Please Note: This program structure is subject to change.**

**Legend:**

(n) The numbers highlighted in brackets e.g. (18) indicates the number of weeks the subject is delivered over.

^ These subjects are delivered in an external/online mode. Some other subjects maybe available in an external/online or blended delivery mode. Please check this with your lecturer at time of registration.

## Plan 2: ‘Fast track’

The following table shows the ‘fast track’ study plan for the Diploma of Information Technology Networking with exit options and skills sets. This option is recommended for those who have studied IT at school or have a good basic understanding of IT. Some subjects are taught in a term or part of a term, others go for the entire semester. The length of time for Part-Time students will depend on the number of subjects studied in each semester.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Stage 1 (Year 1) | | Stage 2 (Year 1) | | | Stage 3 (Year 2) | | Stage 4 (Year 2) | | |
| Semester 1 | | Semester 2 | | | Semester 1 | | Semester 2 | | |
| Term 1 | **Term 2** | **Term 1** | | **Term 2** | **Term 1** | **Term 2** | **Term 1** | **Term 2** | |
| 3CDH(9)  3WSF(9) 4IVM(12) 3WHS (1) | 4WNI((9)  4LXA(9)  4CDB(9) | 4WAD(9) 5LXN(9)  4CEP(9) | | 5CDR (9)  5CNW(9)  5ECS (9) | 5CDD (9)  5ISV(9)  5EVC (9) | 6CNSA (9)  6EWS (9) 6NPS (9) | 6CNSB (9) 6EWD (9) 6NCP (9) |  | |
|  |  | | |  | |  | |
| Skill Sets | | | | | | | | | |
| Gain the:   * *Certified Networking Technician Skill Set* * *Certified Server Administrator Skill Set* * *Certified Technology Specialist - Graphical User Interfaces Skill Set* * *System and Network Plus Technician Skill Set* | | | | Gain the**:**   * ***Virtualisation Specialist Skill Set*** * ***Certified Network Associate Technology Specialist Skill Set*** | | Gain the**:** | | |  |
| Exit Qualifications | | | | | | | | | |
| Exit with the *Certificate IV in Information Technology Networking* | | | Exit with the ***Diploma of Information Technology Networking*** | | | Exit with the ***Advanced Diploma of Network Security*** | |  | |

**Please Note: This program structure is subject to change.**

**Legend:**

(n) The numbers highlighted in brackets e.g. (18) indicates the number of weeks the subject is delivered over.

^ These subjects are delivered in an external/online mode. Some other subjects maybe available in an external/online or blended delivery mode. Please check this with your lecturer at time of registration.

## Further Information:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| |  |  | | --- | --- | | **Address:** Information Technology & Library Studies  Level 2 (South), 120 Currie Street  Adelaide SA 5000 | **Telephone:** (08) 8207 8350  **Fax:** (08) 8207 8291  **Email:** it.studies@tafesa.edu.au | | CRICOS Provider Name: Department of Further Education,  Employment, Science and Technology trading as TAFE SA | CRICOS No: 00092 | | |  |
|  | |

# Training Package Delivery and Student Study Outline for the Certificate III in Information, Digital Media and Technology (ICA30111)

To receive the Award students need to complete the following subjects

|  |  |  |  |
| --- | --- | --- | --- |
| Subject | National  Code | Competency Name | Pre-  Requisite |
| 3SWP | **Sustainable Work Practices** | | |
| BSBSUS301A | Implement and monitor environmentally sustainable work practices | N/A |
| 3CUD | **Create User Documentation** | | |
| ICAICT301A | Create user documentation | N/A |
| 3WHS | **Workplace Health and Safety** | | N/A |
| BSBOHS302B | Participate effectively in OHS communication and consultative processes |
| 3ITE | **Cisco IT Essentials** | | |
| ICASAS301A | Run standard diagnostic tests | N/A |
| ICAICT302A | Install and optimise operating system software |
| ICAICT202A | Work and communicate effectively in an IT environment |
| ICASAS303A | Care for computer hardware |
| ICAICT303A | Connect internal hardware components |
| ICASAS306A | Maintain equipment and software |
| ICASAS304A | Provide basic system administration |
| 3CDH | **Cisco Discovery Home** | | |
| ICANWK305A | Install and manage network protocols | 3ITE |
| ICASAS307A | Install, configure and secure a small office home office network |
| ICANWK405A | Build a small wireless local area network |
| 4IVM | **Install Virtual Machines** | | |
| ICANWK402A | Install and configure virtual machines for sustainable ICT | 3ITE (co-req) |
| 3PAC | **Provide Advice to Clients** | | |
| ICASAS305A | Provide IT advice to clients | N/A |
| 3WSF | **Windows Server Fundamentals** | | |
| ICANWK304A | Administer network peripherals | 3ITE |
| ICANWK303A | Configure and administer a network operating system |

## Subject Descriptions

|  |  |
| --- | --- |
| Subject | Description |
| 3SWP | This subject measures current resource use and identifying improvements including the reduction of negative environmental impact caused by work practices. |
| 3CUD | This subject involves following processes to create user documentation that is clear to the target audience which is easy to navigate. |
| 3WHS | This subject involves participation in workplace Occupational Health and Safety (OHS) consultative processes. |
| 3ITE | This course uses the Cisco Networking Academy® IT Essentials curriculum V5 which provides an introduction to the technical skills needed to help meet the growing demand for entry-level ICT professionals. The curriculum covers the fundamentals of computer hardware and software as well as advanced concepts such as security, networking, and the responsibilities of an ICT professional. Students will be eligible to receive the CISCO IT Essential certificate. This course helps students prepare for the CompTIA A+ Essentials exam (220-801) and CompTIA A+ Practical Application exam (220-802). |
| 3CDH | This subject teaches students the skills needed to obtain entry-level home network installer jobs. It also helps students develop some of the skills needed to become network technicians, computer technicians, cable installers, and help desk technicians. It provides a hands-on introduction to networking and the Internet using tools and hardware commonly found in home and small business environments. This subject uses the CISCO Academy Discovery curriculum and is the first subject of the CISCO CENT and CCNA vendor qualification. |
| 4IVM | This subject describes the performance outcomes, skills and knowledge required to develop and implement virtualisation technologies with the goal of providing a more sustainable information and communications technology (ICT) environment. This subject will introduce students to the concept of virtualization and virtualization products such as VMWare Workstation, Server, Player, MS Virtual PC, Hyper-V and Oracle Virtualbox. |
| 3WSF | This subject covers the introduction to understanding how to install a Windows Server 2008 R2, the various roles of Windows Server 2008 R2, and how Windows Server 2008 R2 performance and maintenance impacts a network. This subject is aligned to the Microsoft MTA 98-365 exam by covering Windows Server 2008 R2installation, server roles, storage, and active directory infrastructure. It will provide students with a solid foundation of various networking topics allowing students to gain a strong understanding of Windows Server 2008 R2 administration concepts. |
| 3PAC | This subject describes the performance outcomes, skills and knowledge required to provide IT advice and support to clients, including the communication of comprehensive technical information. |

Students who complete the following competencies will be eligible to receive the **Hardware Technician Skill Set**

|  |  |  |  |
| --- | --- | --- | --- |
| Subject | National  Code | Competency Name | Pre-  Requisite |
| 3ITE | **Cisco IT Essentials** | | |
| ICAICT302A | Install and optimise operating system software | N/A |
| ICASAS301A | Run standard diagnostic tests |  |
| ICAICT303A | Connect internal hardware components |  |
| ICASAS306A | Maintain equipment and software |  |
|  |  |  |
| 3CDH | **Cisco Discovery Home** | | |
| ICASAS307A | Install, configure and secure a small office home office network | 3ITE or equivalent experience |
| 3PAC | **Provide Advice to Clients** | | |
| ICASAS305A | Provide IT advice to clients | N/A |

# Training Package Delivery and Student Study Outline for the Certificate IV in Information Technology Networking (ICA40411)

To receive the Award students need to complete the following subjects

This is not an entry level course. There is an amount of assumed skills and knowledge prior to commence this course. To successfully enter at this level a student needs to have either:

* Completed the Certificate III in Information, Digital Media and Technology, or
* Other study equivalent to it, or
* Have work experience and knowledge equivalent to it.

Please note the pre-requisites and ensure you have the required skill, knowledge or vendor certification to commence the subject. It is usual for students entering at this level to also do 3CDH and 3WSF.

|  |  |  |  |
| --- | --- | --- | --- |
| Subject | National  Code | Competency Name | Pre-  Requisite |
| 3WHS | **Workplace Health and Safety** | |  |
| BSBOHS302B | Participate effectively in OHS communication and consultative processes | N/A |
| 4IVM | **Install Virtual Machines** | | |
| ICANWK402A | Install and configure virtual machines for sustainable ICT | 3ITE or proof of equivalent knowledge |
| 4CDB | **Cisco Discovery Business** | | |
| ICANWK404A | Install, operate and troubleshoot a small enterprise branch network | 3CDH or completion of Cisco Networking Academy CCNA Level 1 |
| ICTTEN4199A | Install, configure and test a router |
| ICTTEN4198A | Install, configure and test an internet protocol network |
| ICASAS426A | Locate and troubleshoot IT equipment, system and software faults |
| 4WNI | **Windows Networking Infrastructure** | | |
| ICANWK403A | Manage network and data integrity | 3WSF, MTA 98-365, or proof of equivalent knowledge |
| ICANWK406A | Install, configure and test network security |
| 4WAD | **Windows Active Directory** | | |
| ICTTEN5201A | Install, configure and test a server | 3WSF, MTA 98-365, or proof of equivalent knowledge |
| ICANWK401A | Install and manage a server |
| ICAICT401A | Determine and confirm client business requirements |
| 4LXA | **Linux Administration** | |  |
| ICANWK408A | Configure desktop environment | 3ITA or proof of equivalent knowledge |
| ICANWK411A | Deploy software to networked computers |

|  |  |  |  |
| --- | --- | --- | --- |
| 5LXN | Linux Network | | |
| ICANWK504A | Design and implement an integrated server solution | 4LXA or proof of equivalent knowledge |
| ICANWK505A | Design, build and test a network server |
| 4CEP | **Copyright Ethics & Privacy** | | |
| ICAICT418A | Contribute to copyright, ethics and privacy in an IT environment | N/A |

## Usual Pathway pre-requisites for people entering at this level

It is usual for students undertaking this course to have completed the **Certificate III in Information, Digital Media and Technology**. Student starting at this level will need to have done or demonstrated knowledge in the following subjects. These are linked to vendor training and you cannot undertake vendor training at the higher level without having completed the lower level.

|  |  |  |  |
| --- | --- | --- | --- |
| Subject | National  Code | Competency Name | Pre-  Requisite |
| 3CDH | **Cisco Discovery Home** | | |
| ICANWK305A | Install and manage network protocols | 3ITE or proof of equivalent knowledge |
| ICASAS307A | Install, configure and secure a small office home office network |
| ICANWK405A | Build a small wireless local area network |

|  |  |  |  |
| --- | --- | --- | --- |
| 3WSF | Windows Server Fundamentals | | |
| ICANWK304A | Administer network peripherals | 3ITE or proof of equivalent knowledge |
| ICANWK303A | Configure and administer a network operating system |

## Subject Descriptions

|  |  |
| --- | --- |
| Subject | Description |
| 3CDH | This subject teaches students the skills needed to obtain entry-level home network installer jobs. It also helps students develop some of the skills needed to become network technicians, computer technicians, cable installers, and help desk technicians. It provides a hands-on introduction to networking and the Internet using tools and hardware commonly found in home and small business environments. This subject uses the CISCO Academy Discovery curriculum and is the first subject of the CISCO CENT and CCNA vendor qualification.. |
| 3WSF | This subject covers the introduction to understanding how to install a server, the various roles of a server, and how server performance and maintenance impacts a network. This subject is aligned to the Microsoft MTA 98-365 exam by covering Windows Server installation, server roles, storage, and active directory infrastructure. It will provide students with a solid foundation of various networking topics allowing students to gain a strong understanding of Windows Server administration concepts. |

## Subject Descriptions

|  |  |
| --- | --- |
| Subject | Description |
| 4CEP | This subject involves maintaining professional and ethical conduct as well as to ensure that personal information of stakeholders is handled in a confidential and professional manner when dealing with stakeholders in an information technology (IT) environment. |
| 3WHS | This subject involves participation in workplace Occupational Health and Safety (OHS) consultative processes. |
| 4IVM | This subject describes the performance outcomes, skills and knowledge required to develop and implement virtualisation technologies with the goal of providing a more sustainable information and communications technology (ICT) environment. This subject will introduce students to the concept of virtualization and virtualization products such as VMWare Workstation, Server, Player, MS Virtual PC, Hyper-V and Oracle Virtualbox |
| 4CDB | This subject prepares students for jobs as network technicians and helps them develop additional skills required for computer technicians and help desk technicians. It provides a basic overview of routing and remote access, addressing, and security. It also familiarizes students with servers that provide email services, web space, and authenticated access. Students learn about the soft skills required for help desk and customer service positions, and the final chapter helps them prepare for the CCENT certification exam. Network monitoring and basic troubleshooting skills are taught in context. |
| 4WNI | This subject provides students with the knowledge and skills to configure and troubleshoot Windows Server 2008 and Windows Server 2008 R2 Sp1 Network Infrastructures. It will cover networking technologies most commonly used with Windows Server 2008 and Windows Server 2008 R2 Sp1 such as DNS, DHCP, IPv4 and IPv6 network addressing, Network Policy server and Network Access Protection and configuring secure network access. It also covers fault tolerant storage technologies, Network Storage and routing and remote access, monitoring and compliance updates as well as other relevant technologies. This subject will help prepare students for the 70-642:TS: Windows Server 2008 Network Infrastructure, Configuring exam. |
| 4WAD | This subject provides in-depth training on implementing, configuring, managing and troubleshooting Active Directory Domain Services (AD DS) in Windows Server 2008 and Windows Server 2008 R2 environments. It covers core AD DS concepts and functionality as well as implementing Group Policies, performing backup and restore and monitoring and troubleshooting Active Directory related issues. After completing this subject students will be able to configure AD DS in their Windows Server 2008 and Windows server 2008 R2 environments. This subject will help prepare students for the 70-640: TS: Windows Server 2008 Active Directory, Configuring exam. |
| 4LXA | This subject will require students learn to be effective users of Linux systems, acquiring skills and understanding of command line functions, file systems, users and groups, bash shell, process management, text editors, network applications, searching and organizing data, and graphical applications. Students learn to be effective administrators of Linux systems, mastering tasks such as hardware and device configuration, file system management, user administration, network configurations, kernel services, attaching new Linux systems to a corporate network, configuring the new systems for end-users, and troubleshooting. |
| 5LXN | This subject will require students learn to deploy and administer the core networking services using Linux which includes the Apache Web Server, the Samba File Server, BIND Domain Name Service, the Sendmail Mail Transport Agent, the Network File System (NFS). Students will learn to secure network applications using application level access control and kernel level firewalling (iptables). |

Students who complete the following competencies will be eligible to receive the **Certified Networking Technician Skill Set**

|  |  |  |  |
| --- | --- | --- | --- |
| Subject | National  Code | Competency Name |  |
| 3CDH | **Cisco Discovery Home** | | |
| ICANWK405A | Build a small wireless local area network |  |
| 4CDB | **Cisco Discovery Business** | | |
| ICANWK404A | Install, operate and troubleshoot a small enterprise branch network |  |
| ICTTEN4199A | Install, configure and test a router |

**Certified IT Network Enterprise, Security or Server Administrator Skill Set**

|  |  |  |  |
| --- | --- | --- | --- |
| Subject | National  Code | Competency Name |  |
| 4WNI | **Windows Networking Infrastructure** | | |
| ICANWK403A | Manage network and data integrity |  |
| ICANWK406A | Install, configure and test network security |

**Certified Technology Specialist – Graphical User Interfaces Skill Set**

|  |  |  |  |
| --- | --- | --- | --- |
| Subject | National  Code | Competency Name |  |
| 4WNI | **Windows Networking Infrastructure** | | |
| ICANWK403A | Manage network and data integrity |  |
| 4LXA | **Linux Administration** | | |
| ICANWK408A | Configure desktop environment |  |

**System and Network Plus Technician Skill Set**

|  |  |  |  |
| --- | --- | --- | --- |
| Subject | National  Code | Competency Name |  |
| 3CDH | **Cisco Discovery Home** | |  |
| ICASAS307A | Install, configure and secure a small office home office network |  |
| 4CDB | **Cisco Discovery Business** | | |
| ICANWK404A | Install, operate and troubleshoot a small enterprise branch network |  |
| 4WNI | **Windows Networking Infrastructure** | | |
| ICANWK406A | Install, configure and test network security |  |
| 4WAD | **Windows Active Directory** | | |
| ICANWK401A | Install and manage a server |  |

# Training Package Delivery and Student Study Outline for the Diploma of Information Technology Networking (ICA50411)

To receive the Award students need to complete the following subjects

This is not an entry level course. There is an amount of assumed skills and knowledge prior to commence this course. To successfully enter at this level a student needs to have either:

* Completed the Certificate IV in Information Technology Networking
* Other study equivalent to it, or
* Have work experience and knowledge equivalent to it.

## Please note the pre-requisites and ensure you have the required skill, knowledge or vendor certification to commence the subject.

To receive the Award students need to complete the following subjects

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Subject | National  Code | | Competency Name | Pre-  Requisite |
| 4CEP | **Copyright, Ethics and Privacy** | | | |
| ICAICT418A | | Contribute to copyright, ethics and privacy in an IT environment | N/A |
| 4WAD | **Windows Active Directory** | | | |
| ICTTEN5201A | Install, configure and test a server | | 3WSF, MTA 98-365, or proof of equivalent knowledge |
| ICANWK401A | Install and manage a server | |
| ICAICT401A | Determine and confirm client business requirements | |
| 5LXN | **Linux Network** | | | |
| ICANWK504A | | Design and implement an integrated server solution | 4LXA, Linux RHCSA or proof of equivalent knowledge |
| ICANWK505A | | Design, build and test a network server |
| 5CDR | **Cisco Discovery Routing** | | | |
| ICANWK506A | | Configure, verify and troubleshoot WAN links and IP services in a medium enterprise network | 4CDB or completion of Cisco Networking Academy CCNA Level 2 |
| ICANWK507A | | Install, operate and troubleshoot medium enterprise routers |
| ICANWK508A | | Install, operate and troubleshoot medium enterprise switches |
| 5ISV | **Implement Server Virtualisation** | | | |
| ICTSUS5187A | | Implement server virtualisation for a sustainable ICT system | 4IVM, 4WAD  4WNI, MS 70-640 and 642, or proof of equivalent knowledge |

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| --- | --- | --- | --- | --- | --- | --- |
| 5CDD | Cisco Discovery Design | | | | | |
| ICTTEN6206A | | Produce an ICT network architecture design | | 5CDR or completion of Cisco Networking Academy CCNA Level 3 | |
| ICANWK518A | | Design an enterprise wireless local area network | |
| 5EVC | | **Enterprise Virtual Computing** | | | | |
| ICANWK525A | | Configure an enterprise virtual computing environment | | 4IVM, 4WAD MS 70-640 or proof of equivalent knowledge |
| ICANWK526A | | Install an enterprise virtual computing environment | |
| ICANWK527A | | Manage an enterprise virtual computing environment | |
| 5ECS | | **Enterprise Communication Solutions** | | | | |
| ICANWK501A | | Plan, implement and test enterprise communication solutions | | 4IVM 4WAD  4WNI, MS 70-640 and 642, or proof of equivalent knowledge |
| ICAICT511A | | Match IT needs with the strategic direction of the enterprise | |
| 5CNW | | **Complex Networks** | | | | |
| ICANWK529A | | Install and manage complex ICT networks | | 4IVM 4WAD  4WNI, MS 70-640 and 642, or proof of equivalent knowledge |

˜ Students require one competency from 4WAD or from elsewhere in ICA11 or accredited course at Diploma or Advanced Diploma level.

## Subject Descriptions

|  |  |
| --- | --- |
| Subject | Description |
| 4CEP | This subject involves maintaining professional and ethical conduct as well as to ensure that personal information of stakeholders is handled in a confidential and professional manner when dealing with stakeholders in an information technology (IT) environment. |
| 5LXN | This subject will require students learn to deploy and administer the core networking services using Red Hat Enterprise Linux which includes the Apache Web Server, the Samba File Server, BIND Domain Name Service, the Sendmail Mail Transport Agent, the Network File System (NFS). |
| 5CDR | This subject familiarizes students with the equipment applications and protocols installed in enterprise networks, with a focus on switched networks, IP Telephony requirements, and security. It also introduces advanced routing protocols such as Enhanced Interior Gateway Routing Protocol (EIGRP) and Open Shortest Path First (OSPF) Protocol. Hands-on exercises, including configuration, installation, and troubleshooting, reinforce student learning. This subject uses the CISCO Academy Discovery curriculum and is the first subject of the CISCO CCENT2 and CCNA vendor qualification. |
| 5CDD | This subject introduces students to network design processes using two examples; a large stadium enterprise network and a medium-sized film company network. Students follow a standard design process to expand and upgrade each network, which includes requirements gathering, proof-of-concept, and project management. Lifecycle services, including upgrades, competitive analyses, and system integration, are presented in the context of pre-sale support. This subject uses the CISCO Academy Discovery curriculum and is the second subject of the CISCO CCENT2 and CCNA vendor qualification. |
| 5ECS | This subject will introduce students skills and knowledge required to ensure IT services meet current and future internal operating enterprise requirements. Students will learn the skills and knowledge required to management deployment and administration of enterprise messaging and content management and collaboration tools |

|  |  |
| --- | --- |
| 5EVC | In this subject students will explore installation, configuration, and management of VMware vSphere, which consists of VMware ESXi and VMware vCenter Server. Student will learn the skills and knowledge to install and configure a virtualisation environment and understand the fundamentals of server consolidation. This subject closely based on the VMware VCP Install and Configure certification. |
| 5ISV | Welcome to 5ISV, this subject will introduce students to the skills and knowledge required to install and integrate a virtual server in a network to replace physical servers |
| 5CNW | This subject will introduce students to the skills and knowledge required to install and manage enterprise-wide information and communications technology networks, including Voice over IP (VoIP). |

Students who complete the following competencies will be eligible to receive the **Virtualisation Specialist Skill Set**

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| --- | --- | --- | --- |
| Subject | National  Code | Competency Name | Pre-  Requisite |
| 5EVC | **Enterprise Virtual Computing** | | |
| ICANWK525A | Configure an enterprise virtual computing environment | 4IVM, 4WAD MS 70-640 or proof of equivalent knowledge |
| ICANWK525A | Install an enterprise virtual computing environment |
| ICANWK527A | Manage an enterprise virtual computing environment |

**Certified Network Associate Technology Specialist Skill Set**

|  |  |  |  |
| --- | --- | --- | --- |
| Subject | National  Code | Competency Name | Pre-  Requisite |
| 5CNW | **Complex Networks** | | |
| ICANWK529A | Install and manage complex ICT networks | 4IVM 4WAD  4WNI, MS 70-640 and 642, or proof of equivalent knowledge |
| 5CDR | **Cisco Discovery Routing** | | |
| ICANWK506A | Configure, verify and troubleshoot WAN links and IP services in a medium enterprise network | 4CDB or completion of Cisco Networking Academy CCNA Level 2 |
| ICANWK507A | Install, operate and troubleshoot medium enterprise routers |
| ICANWK508A | Install, operate and troubleshoot medium enterprise switches |